

Commissioner of Patents
USSN 10/661,415

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (currently amended): A method for the prophylaxis or treatment of a RSV or parainfluenza virus infection in a subject, comprising

administering to a subject in need of such treatment a therapeutically effective amount of at least one pharmacologically acceptable oligonucleotide at least 10 nucleotides in length, wherein said oligonucleotide comprises at least one phosphorothioated linkage and wherein the anti-viral activity of said oligonucleotide occurs principally by a non-sequence complementary mode of action.

Claim 2 (original): The method of claim 1, wherein said subject is a human.

Claim 3 (withdrawn): An antiviral pharmaceutical composition comprising

a therapeutically effective amount of at least one pharmacologically acceptable, antiviral oligonucleotide at least 10 nucleotides in length, wherein said composition is approved for use in humans against RSV or parainfluenza virus and the antiviral activity of said oligonucleotide occurs principally by a non-sequence complementary mode of action; and a pharmaceutically acceptable carrier.

Claim 4 (withdrawn): The antiviral pharmaceutical composition of claim 3, adapted for delivery by oral ingestion.

Claim 5 (withdrawn): The antiviral pharmaceutical composition of claim 3, adapted for delivery enterally.

Claim 6 (withdrawn): The antiviral pharmaceutical composition of claim 3, adapted for delivery by injection.

Claim 7 (withdrawn): The antiviral pharmaceutical composition of claim 3, adapted for delivery by inhalation.

Claim 8 (withdrawn): The antiviral pharmaceutical composition of claim 3, adapted for delivery topically.

Claim 9 (withdrawn): The antiviral pharmaceutical composition of claim 3, wherein said composition further comprises a delivery system.

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Claim 10 (withdrawn): The antiviral pharmaceutical composition of claim 3, wherein said composition further comprises a liposomal formulation.

Claim 11 (withdrawn): The antiviral pharmaceutical composition of claim 3, wherein said composition further comprises at least one other antiviral drug in combination.

Claim 12 (withdrawn): A kit comprising at least one anti-viral oligonucleotide or anti-viral oligonucleotide formulation in a labeled package, wherein said oligonucleotide is at least 10 nucleotides in length, the anti-viral activity of said oligonucleotide occurs principally by a non-sequence complementary mode of action, and the label on said package indicates that said anti-viral oligonucleotide can be used against RSV or parainfluenza virus.

Claim 13 (withdrawn): The kit of claim 12, wherein said kit is approved by a regulatory agency for use in humans.

Claim 14 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein said at least one antiviral oligonucleotide comprises at least one antiviral randomer oligonucleotide.

Claim 15 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein said oligonucleotide is not complementary to any portion of the genomic sequence of RSV or parainfluenza virus.

Claim 16 (Cancelled).

Claim 17 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein said oligonucleotide is at least 40 nucleotides in length.

Claim 18 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein each said oligonucleotide comprises at least one modification to its chemical structure.

Claim 19-20 (Cancelled).

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Claim 21 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein each said oligonucleotide comprises at least one 2'-modification to the ribose moiety.

Claim 22 (Cancelled).

Claim 23 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein each said oligonucleotide comprises at least one phosphorodithioated linkage.

Claim 24-26 (Cancelled).

Claim 27 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein said oligonucleotide is double stranded.

Claim 28 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein said oligonucleotide binds to one or more viral components.

Claim 29 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, wherein at least a portion of the sequence of said oligonucleotide is derived from a viral genome.

Claim 30 (currently amended): The method, pharmaceutical composition, or kit of claim 1, 3, or 12, comprising a mixture of at least two different antiviral oligonucleotides.

Claim 31 (currently amended): The method, pharmaceutical composition, or kit of claim 30, wherein a plurality of said different oligonucleotides are at least 10 nucleotides in length.

Claim 32 (currently amended): The method, pharmaceutical composition, or kit of claim 30, wherein a plurality of said different oligonucleotides are at least 40 nucleotides in length.

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Claim 33 (withdrawn): A method for selecting an antiviral oligonucleotide for use as an anti-viral agent, comprising

synthesizing a plurality of different oligonucleotides, wherein at least one of said different oligonucleotides is at least 10 nucleotides in length;

testing said oligonucleotides for activity in inhibiting the ability of RSV or parainfluenza virus to produce infectious virions,

selecting a said oligonucleotide having a pharmaceutically acceptable level of activity for use as an anti-viral agent.

Claim 34 (withdrawn): The method of claim 33, wherein said different oligonucleotides comprise randomers of different lengths.

Claim 35 (withdrawn): The method of claim 33, wherein said different oligonucleotides comprise a set of oligonucleotides of different length, each oligonucleotide in said set comprising the sequence of the shortest oligonucleotide in said set.

Claim 36 (withdrawn): The method of claim 33, wherein said different oligonucleotides comprise a plurality of oligonucleotides comprising a randomer segment at least 6 nucleotides in length.

Claim 37 (withdrawn): The method of claim 33, wherein said different oligonucleotides are not complementary to any RSV or parainfluenza virus mRNA sequence.

Claim 38 (currently amended): A method for the prophylaxis or treatment of a RSV or parainfluenza virus infection in a subject, comprising

administering to a subject in need of such treatment a therapeutically effective amount of at least one pharmacologically acceptable oligonucleotide randomer at least 10 nucleotides in length, wherein said oligonucleotide comprises at least one phosphorothioated linkage and wherein the anti-viral activity of said randomer occurs principally by a non-sequence complementary mode of action.

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Claim 39 (New): The method of claim 1 or 2, wherein each nucleotide of said oligonucleotide are linked to one another by a phosphorothioated linkage.

Claim 40 (New): The method of claim 1 or 2, wherein said oligonucleotide is selected from the group consisting of REP 2003, REP 2004, REP 2005, REP 2006, REP 2007, REP 2008, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 9, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, REP 2024, SEQ ID NO: 20, SEQ ID NO: 23, SEQ ID NO: 25, SEQ ID NO: 26 and REP 2060.

Claim 41 (New): The method of claim 1 or 2, wherein said oligonucleotide is SEQ ID NO: 22.

Claim 42 (New): The method of claim 1 or 2, wherein said oligonucleotide is SEQ ID NO: 24.